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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,657	02/21/2002	Edward Henry Cross	3003-1005	4838

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EXAMINER

DRODGE, JOSEPH W

ART UNIT PAPER NUMBER

1723

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/078,657

Applicant(s)

CROSS ET AL.

Examiner

Joseph W. Drodge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 202,702. 6) ☐ Other:

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## NON-FINAL REJECTION

Figure 1 should be labeled "Prior Art" since it shows what is already known.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claims 5, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 contains numerous grammatical errors "th", "the said", "d fined", "t nsion", etc.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers patent 5,152,892.

Chambers discloses a filter element in the form of a coiled spring containing projections 15 to define pre-set gaps between the coils [as in claims 1,9 and 12], each gap supporting the weight of the coils thereabove (column 2, lines 1-2) [as in claim 5].

The claims differ in explicitly requiring that the "pre-tensioning" of the coils varies throughout the length of the filter element. However, Chambers discloses that "resilience" and/or stiffness" varies progressively/continuously [as in claim 2] between individual coils or sections of coils/stepped fashion [as in claim 3], see column 1, lines 29-36 and claims 7 and 8 of Chambers. Thus, it would have been obvious for the ordinarily skilled artisan in the filter-making art to have considered the varying of "resilience" or "stiffness" disclosed by Chambers to constitute varying of "pre-tensioning", since the result of the coils each supporting the weight of coils thereabove is achieved.

Regarding claims 10, 11 and 13, no cage is shown.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers as applied to claims 1 above, and further in view of Maeda et al patent 6,283,305.

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Chambers further discloses the filter element being backwashable by way of extension of the coils (column 1, lines 6-9 and column 2, lines 10-13). However, claims 6-8 differ in requiring the backwashing means to constitute a closure at one end. Maeda et al '305 teaches such closure mechanism (column 5, lines 20-46, see closure 4/3/31. It would have been further obvious to have equipped the Chambers device with such backwash effecting closure, as taught by Maeda et al '305, so as to generate fast, uniform, effective cleaning.


Regarding claims 7 and 8, also see Maeda et al for housing 1, a backwashing piston (column 5, lines 30-33) and a controller (column 8, lines 2-4).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PGPUBS US2002/0020663 and patents 5,207,930 and 6,209,728 teach further mechanisms for backwashing or otherwise cleaning the coils of filter elements..

Any inquiry concerning this communication or other matters regarding prosecution of this application should be directed to examiner Joseph Drodge at telephone number (703) 308-0403 Monday-Friday between 8:30 AM and 4:45 PM. The Fax number for the examining group is (703) 872-9306.

JWD

September 22, 2003

  
JOSEPH DRODGE  
PRIMARY EXAMINER